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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/186,450	11/05/1998	ALAN H. KARP	10980759	1805

22879 7590 03/10/2004

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

HO, THE T

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 03/10/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

PRE

Office Action Summary

Application No.

09/186,450

Applicant(s)

KARP ET AL.

Examiner

The Thanh Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the amendment filed 12/19/2003.
2. Claims 1-35 have been examined and are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-8, 12-15, 20-22, 24-26, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto U.S Patent No. 5,603,020.

As to claim 1, Hashimoto discloses a set of available resources (files, line 18 column 9), name space (task-to-file correspondence management tables 5, and 29, Fig. 8) corresponds (receipt of a request to acquire a directory, line 56 column 10) to a task executing (8, application program task A, Fig. 8) in the software system (operating system, Fig. 8), the name space holding a flexible binding (a new entry storing a pointer, line 60 column 10) that binds (directly points to, line 59 column 10) a local name (1 of task management table 6, Fig. 8) used by the task (task 8, Fig. 8) to resources using a description (a file descriptor, line 65 column 10) of a desired resource (the file, line 65 column 10).

Hashimoto does not explicitly disclose a resource mediator. However, Hashimoto teaches a table (task management table 6, Fig. 8) obtains a message

(arrows from application program 8 to task management table 6, Fig. 8) from the task, the resource mediator identifies a resource handler task (4, file management table, Fig. 8) for handling the message by resolving (arrows from task management table 6 to task-to-file correspondence management tables 5, and 29, Fig. 8) the local name using the flexible binding (a new entry storing a pointer, line 60 column 10). Therefore one of ordinary skill in the art would conclude that this task management table is in fact a resource mediator since all of the bindings between the task and the resources are handled by this table as disclosed by Hashimoto (line 51 column 10 to line 59 column 11).

As to claim 2, Hashimoto as modified further teaches a reference (28, directory-oriented file management table, Fig. 8) to the resource descriptor in a repository (task management table 6, Fig. 8) of the software system for the resources.

As to claim 3, Hashimoto as modified further teaches a binding-type indicator (i node number, line 66 column 10) that informs (request to acquire, line 56 column 10) the resource mediator to use the references or description of the desired resource.

As to claim 4, Hashimoto as modified further teaches the message (arrows from application program 8 to task management table 6, Fig. 8) includes a binding-type indicator (i node number, line 66 column 10) that informs (request to acquire, line 56 column 10) the resource mediator to use the references or description of the desired resource.

As to claim 7, Hashimoto as modified further teaches the binding-type indicator (i node number, line 66 column 10) causes the resource mediator (task management

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table 6, Fig. 8) to use a flexible binding (S37, Fig. 9) when resolving (to obtain, S37 Fig. 9) the local name (S36, Fig. 9) by searching the repository (S38, Fig. 9) for a resource descriptor (file name, S39 Fig. 9) having a set of attributes (file name relative to directory, S39 Fig. 9) that match (corresponding, S39 Fig. 9) description of the desired resource.

As to claim 8, Hashimoto as modified further teaches the binding-type indicator (i node number, line 66 column 10) causes the resource mediator (task management table 6, Fig. 8) to use a flexible binding (S37, Fig. 9) to update (S42, and S43, Fig. 11) the references when resolving (to obtain, S37 Fig. 9) the local name (S36, Fig. 9) by searching the repository (S38, Fig. 9) for a resource descriptor (file name, S39 Fig. 9) having a set of attributes (file name relative to directory, S39 Fig. 9) that match (corresponding, S39 Fig. 9) the description of the desired resource (S. 39, Fig. 9).

As to claim 12, Hashimoto as modified further teaches the message includes a primary resource field that holds the local name (1 of task management table 6, Fig. 8) for the desired resource and a set of additional resource fields each of which holds a local name (2 of task management table 6, Fig. 8) that the task uses to refer to an additional resource.

As to claim 13, Hashimoto as modified further teaches primary resource field (1 of task management table 6, Fig. 8) and each additional resource field (2 of task management table 6, Fig. 8) includes a field for holding a local name (task-to-file correspondence management tables 5, and 29, Fig. 8).

As to claim 14, Hashimoto as modified further teaches the resource handler (4, file management table, Fig. 8) uses a default name space (task-to-file correspondence management tables 5, and 29, Fig. 8) associated with the task to resolve the local names in the primary resource (1 of task management table 6, Fig. 8) and additional resource fields (2 of task management table 6, Fig. 8).

As to claim 15, Hashimoto as modified further teaches the primary resource field (1 of task management table 6, Fig. 8) includes a binding-type indicator (i node number, line 66 column 10) that informs (request to acquire, line 56 column 10) the resource mediator (task management table 6, Fig. 8) of how to resolve (detection procedure, line 55 column 10) the local name in the primary resource field (1 of task management table 6, Fig. 8).

As to claim 20, note the discussion of claim 2. Moreover, Hashimoto as modified further teaches the message (arrows from task 8 to operating system task management table 6, Fig. 13) specifies a repository view (8, task A Fig. 13) that holds a subset of resource descriptors (open /a/b/d/e/x, file descriptor Fig. 13).

As to claim 21, note the discussions of claims 16 and 20 above.

As to claim 22, note the discussion of claim 1 above.

As to claim 24, note the discussions of claims 1 and 2 above.

As to claim 25, note the discussion of claim 7 above.

As to claim 26, note the discussions of claims 7 and 8 above.

As to claims 30 and 31, note the discussions of claims 12 and 14 above, respectively.

4. Claims 5-6, 23, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Govett U.S Patent No. 5,761,507.

As to claim 5, Hashimoto as disclosed does not teach the use of tight binding to resolve the local name. Govett teaches the use of tight binding (results in tight binding, line 36 column 5) to resolve the local name (connections to plural servers, line 35 column 5). It would have been obvious to apply the teachings of Govett to the system of Hashimoto because tight binding will solve the problem when there is more than one of the repository handles is listed as disclosed by Govett (lines 26-45 column 5).

As to claim 6, note the discussions of claims 3 and 5 above.

As to claim 23, note the discussions of claims 2 and 6 above.

As to claim 35, note the discussions of claims 2, 5 and 6 above.

5. Claims 9, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Nomura U.S Patent No. 5,790,853.

As to claim 9, Hashimoto as disclosed does not explicitly teach removing any of the references that correspond to resources that are not currently available. Nomura teaches a resource state change section (112, Fig. 45) where a resource reference can be changed, added, or deleted (line 43-47 column 24). It would have been obvious to apply the teachings of Nomura to the system of Hashimoto because once the resource is not currently available doing the processing; its reference is no longer needed and can be removed; therefore freeing up the memory space as disclosed by Nomura (lines 13-47 column 24).

As to claim 27, note the discussion of claim 9 above.

6. Claims 10-11, 16-19, 28-29, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto in view of Ji U.S Patent No. 5,623,600.

As to claim 10, Hashimoto as disclosed does not explicitly teach the resource mediator enables the task to transfer the flexible binding to another task. Ji teaches task to transfer (transfer, line 46 column 7) the flexible binding (commands, line 47 column 7) to another task (server task, line 47 column 7) in the software system. It would have been obvious to apply the teachings of Ji to the system of Hashimoto because this allows the resource mediator to transfer the binding from the first task to the second task to avoid name conflicts as disclosed by Ji (line 29-65 column 7).

As to claim 11, Ji further teaches task to transfer (transfer, line 46 column 7) the flexible binding (commands, line 47 column 7) to another task (server task, line 47 column 7) in the software system along (including, line 48 column 7) with a set of additional flexible bindings (binding, line 48 column 7).

As to claim 16, Ji further teaches the flexible binding is a partial binding (806, and 808, Fig. 8A) that includes a reference (spawn SMTP daemon, 808 Fig. 8A) to a resource descriptor for a resource associated with a task (812, Fig. 8A) that will complete the partial binding (800, and 818, Fig 8A).

As to claim 17, note the discussion of claim 10.

As to claim 18, note the discussion of claim 10. Moreover, Ji teaches the task to transfer the partial binding to another task in another software system (transferring data out of the protected domain of the network, line 32-33 column 7).

As to claim 19, Hashimoto as modified further teaches the name space (task-to-file correspondence management tables 5, and 29, Fig. 8) is arranged as a structured name space with an ordered list of frames (1, and then 2 of task management table 6, Fig. 8).

As to claims 28-29, note the discussions of claims 10-11 above, respectively.

As to claims 32-34, note the discussions of claims 16-18 above, respectively.

Response to Arguments

7. Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant argued that Hashimoto reference does not teach, "...binding a local name used by a task to available resources..." and "...binding a local name to available resources using a description of a desired resource..." (Remarks, sixth paragraph page 9, first paragraph page 11) by discussing lines 8-29 column 2 and lines 25-26 column 1 of Hashimoto reference. In response, the lines and columns mentioned above were not used by the examiner in the claim 1 rejection. Note the rejection of claim 1 above for the appropriate citations from the Hashimoto reference.

Applicant argued that in Hashimoto reference, element 1 of table 6 is not a local name (Remarks, second paragraph page 10). In response, Hashimoto reference (lines

49-52 column 11) clearly verifies that the entry number added to file descriptor management table 7 is presented as a file descriptor that is used by the application to locate the file as showed in Fig. 8. The reference meets the limitation as claimed.

Applicant argued that Hashimoto reference does not teach binding a local name used by a task to multiple resources (Remarks, last paragraph page 10). In response, claim 1 language clearly stated that "...binds a local name used by a task to ONE OR more of the available resources..." As understood here, the binding can be satisfied by just one resource. The reference meets the limitation as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to The Thanh Ho whose telephone number is 703-306-

5540. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Any response to this action should be mailed to:

Commissioner for Patents


P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 746 – 7238
- OFFICAL faxes must be signed and sent to (703) 746 – 7239
- NON OFFICAL faxes should not be signed, please send to (703) 746 – 7240

TTH
March 5, 2004


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100